<u> </u>	AGG	TAT TAT TAT	TAT		00000000000000000000000000000000000000	CTC	CTC
	7CC	900 900 900 900	AAG		ATT	CTG	CTC TCT TCT TCT
OTO DI	TTA	CTG	CAG		TCT	GAG	CAG
<u> </u>	SS SS	CAG	GAG		GAG	CIA	GTG
	ATT	TAC CAC TAC CAC	AAG GAA		TCA	AAC	222
<u>6CT</u>	ACC	CTG	CTG		TTC	177 177 177 177 177	GAG
CTG	CCA	CGC CGT CGC CGC	ATC		76C 76T 76C 76T	AAA	CTG
CIC	TTC	CGT CAT CGT CAT	TAT		CTC	CAG	TGG
CTG	000	ည	ည္ပ		TOC.	CAG CAA CAG	TCA TCG TCA
	AGT	CGC	GAA		ACC	ACG ACG ACG ACG	CAG
ACG	000	CIC	GAA		CAG	AAA AAA GAA	ACT
<u>5955</u>	GAG	ATG	TTT		200	GTG GAG GTG GAG	CTC
<u> </u>	CAA	GCT	GAG		AAC	AGG	CTG
<u> </u>		AAC	CAG		CAG	AAC	CTG
ACA ACA	<u> 1GG</u>	GAC	TAT	TAT	CTG	700	TCC
GCT		III	ACC		TTC	5858	ATC
ATG	CIG	CH CH	GAC		TCA	ACA	CGC
SEQ ID NO:1 SEQ ID NO:2 SEQ ID NO:3 SEQ ID NO:3							

Figure 1 Translated nucleotide sequence of hGH variants. Dashes indicate section deleted in 20 kDa hGH-V and 20 kDa hGH-N. Underlined section indicates signal sequence.

GTC	AGG	AGC	999	၁၅၁	
AAC	7GG GGG 7GG GGG	TAC	TAC	CTG	
AGC	ATG	TCC ACC ACC	AAC	TTC	
GAC	CTG	CAG	AAG	ACA	TAG
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ACG	AAT AAG AAT AAG	CIC	GAG	TTC
ပ္ပ	CAA	TTC	CTG CTA CTG	GTC	299
200	ATC	ATC	GCA	AAG	TGT
TAT TAC TAT TAC	GGC	CAG	GAC	GAC	AGC
GTG	GAA	999	GAT	ATG	399
CTG	GAG	ACT	AAC	GAC	GAG
AGC	CTA	CGG	CAC	AAG	GTG
AAC	GAC	222	TCG TCA TCG	AGG	TCT
GCC	AAG	AGC	AAA AAA AAA	TTC	CAG TGC CGC
TTC	CTG CTA CTG	299	ACA	TGC	TGC
GTC	CAC CTC CAC	GAT	GAC	TAC	CAG
AGC AGT AGC AGT	CGC GAC CGC	GAA	1117 1117 1117	CTC	ATC GTG
AGG	TAT	CTG	AAG	CTG	ATC

Translated nucleotide sequence of hGH variants. Dashes indicate section deleted in 20 kDa hGH-V and 20 kDa hGH-N.

Figure 1 Cont.

20	Lea	9	Gl	1	l	9	Ē			8	<b>Leu</b>				100	Ser		
	Arg His Arg His		Gla	1	1		£				Set					Asn		
	Arg		Ľ,	1	1		읩				음					Ala		
	Ala		3 5	İ			Set				Arg					Phe		
	Arg		lle				Glu				Ę					Val		
	<u>a</u>		Ţ.	}	1		Ser				Leu					Ser		
	Met Ser Ser		Ala	ŧ	1		Phe				Glu					Arg		
	Ala		컗	1	1		స్ట				Lea					Ę		
	Asm		all B	.]	1		Leu				Asn					ren Fen	E E	Phe
	Asp		Phe				Ser				Ser					윰		
	Phe		n G				草				Lys					Val		
	Leu		윰				Gil				臣					ይ		
	Arg		Τ̈́				Pro				F					흅		
	Ser		TH				Asn				占					Ľen		
	<b>Le</b>		Asp				튬	1	1		Ľ	를	Lys	를		Тŗ		
	P 5		Ty.	Ĭ,	Phe		Leu	1	1			ਫ਼ੋ	Vai	를		જુ		
	<u>=</u>		Ala				Phe	ļ			Arg					띰		
	븉		3				Set	]	}		Asn					음		
	£		뎚				T <sub>Z</sub>	-	Ì		Ser					2		
	Phe		TyT	ž	His		Lys	1			æ					Ľen		
	SEQ ID NO:5 SEQ ID NO:6 SEQ ID NO:7 SEQ ID NO:8																	

Predicted amino acid sequences for 22 kDa hGH-V, 22 kDa hGH-N, 20 kDa hGH-V, 20 kDa hGH-N. A dash indicates deleted amino acids.

PCT/US2004/027187

120 Gły	140 Asn Lys Asn Lys Lys	ξŢ Ş	Na N	
Din Cin	Phe	Asn	E E	·
Gla	<u>1</u> 6	Lys	Arg	
Ę	E E	Lea	Leu	
Asp	di di	Leu	Phe	
Lys	뵨	Ala	븀	
3	Arg	Asp	П	
His Leu His	Po	Asp	Val	
Arg Asp Arg Asp	Se	Asn	Lys	
Ŗ	Ď,	His	Asp	191 Phe
Val	Asp	Ser	Met .	Gly
Asn	ਰੀ	Lys Asn Lys	Asp	Š
Se	Leu	FT ·	Lys	Ser
Asp	Arg	Asp	Arg	g
Set	두 등 두 등	Phe	Phe	Glu
Ala	Met	Lys	ζ.	Vai
Ğ	Leu	Ser	Ţ.	Ser
TyT	Ę	Ţ.	Zeu Zeu	Arg
Val	G.	Ser Thr Thr	Leu	స్ట
<u> </u>	흔	Gin	Gly	r E

Predicted amino acid sequences for 22 kDa hGH-V, 22 kDa hGH-N, 20 kDa hGH-V, 20 kDa hGH-N. A dash indicates deleted amino acids. Figure 2. Cont.

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# bGH Radioreceptor Assay rbGH Tracer; Assay 0426

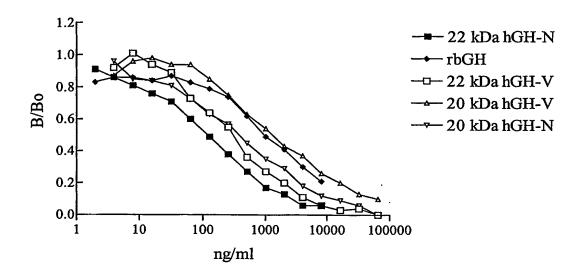


FIGURE 3

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# bGH Radioreceptor Assay rbGH Tracer; Assay 0440

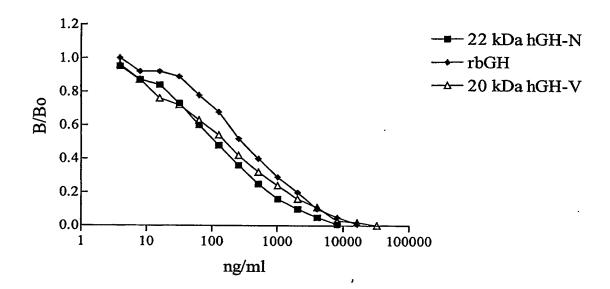


FIGURE 4

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### hGH Radioreceptor Assay rhGH Tracer; Assay 0434

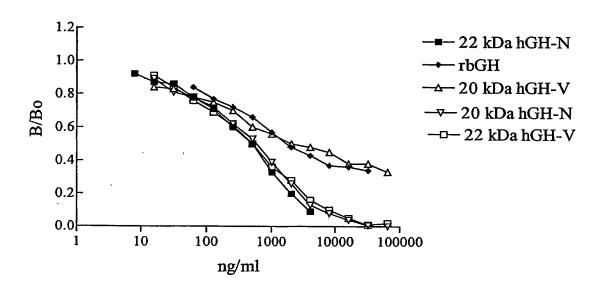


FIGURE 5

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hGH Radioreceptor Assay
rhGH Tracer; Assay 0435

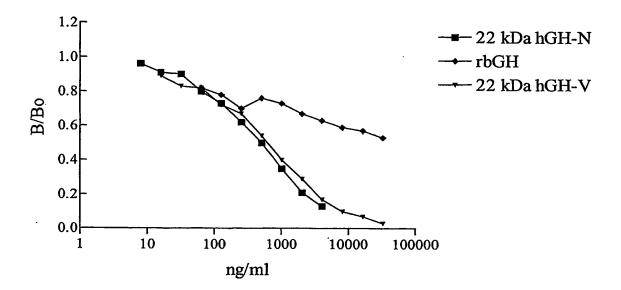


FIGURE 6

# oPRL Radioreceptor Assay oPRL Tracer; Assay 0439

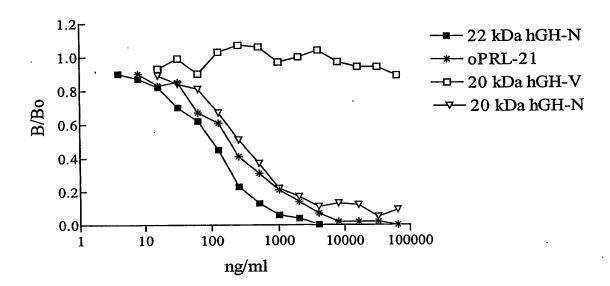


FIGURE 7

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## hGH Radioreceptor Assay rhGh Tracer; Assay 0441

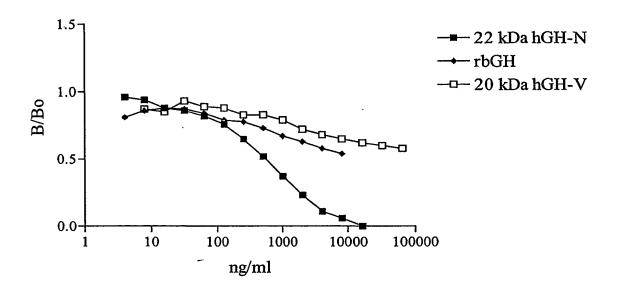


FIGURE 8

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#### Change in Body Weight

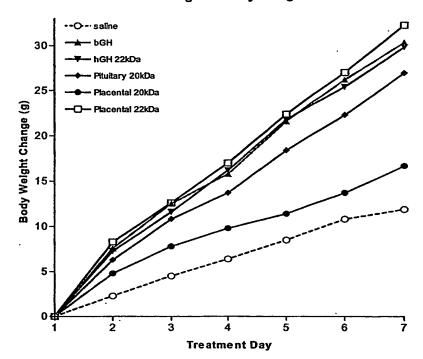
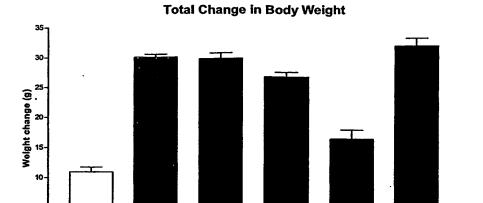


Figure 9



hGH 22kDa

bGH

Figure 10A

Treatment Group

Pitultary 20kDa Placental 20kDa Placental 22kDa

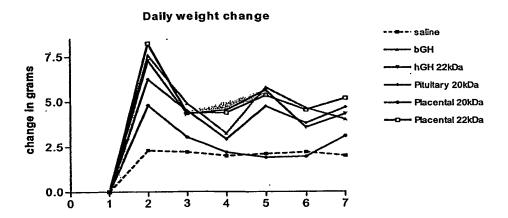


Figure 108

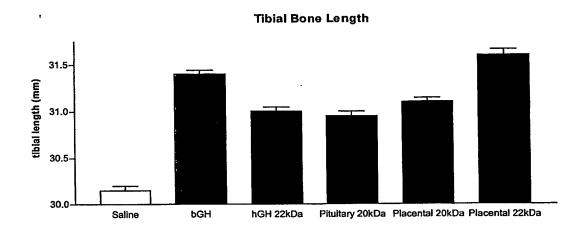


FIGURE 11

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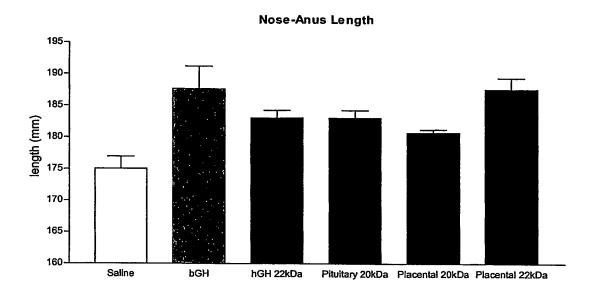


FIGURE 12

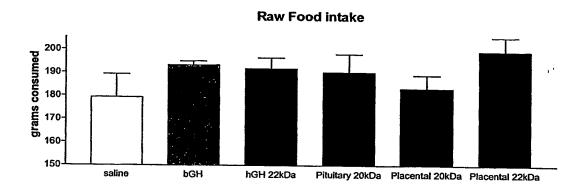


Figure 13A

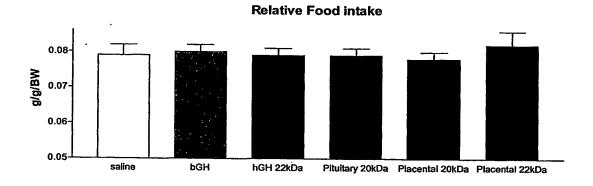


Figure 13B

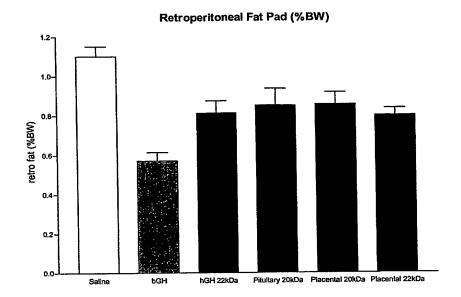


FIGURE 14

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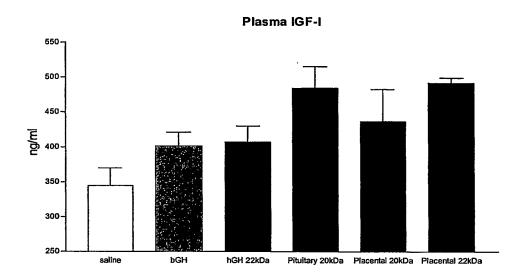
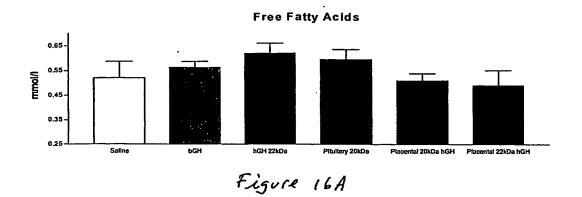
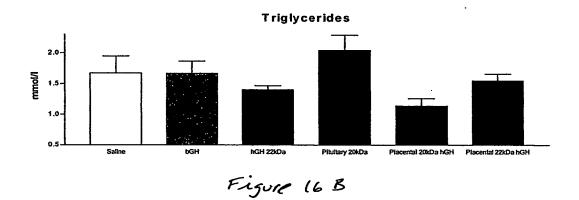


FIGURE 15





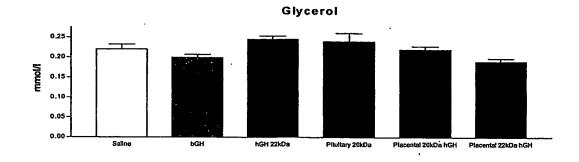


Figure 160

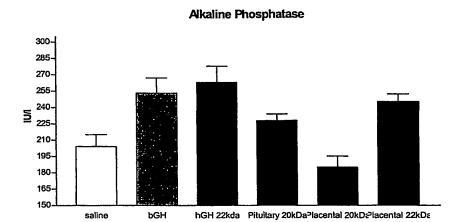


FIGURE 17

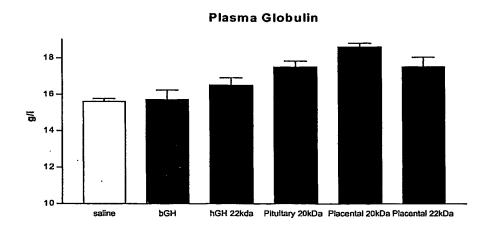


FIGURE 18

PCT/US2004/027187

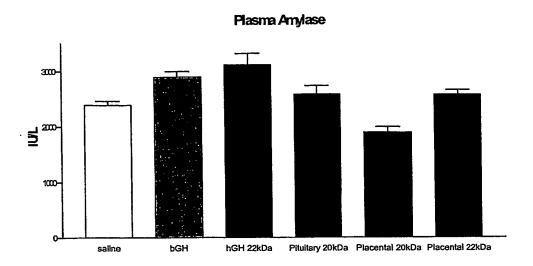


FIGURE 19

PCT/US2004/027187

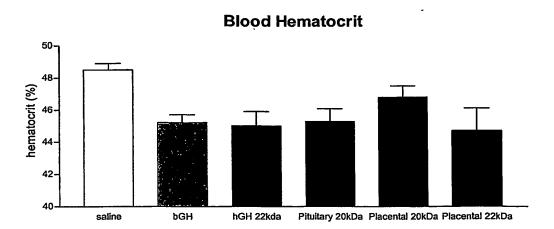


FIGURE 20

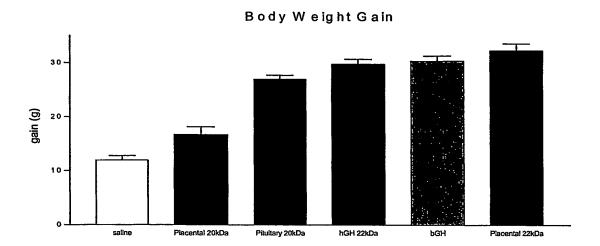


FIGURE 21